

A photograph of a beach with golden sand in the foreground, waves breaking on the shore, and a cloudy sky in the background. The text is overlaid on the image.

# **Proposed Beach Nourishment Funding**

Christopher Layton  
Town Manager

September 18, 2013

# **Proposed Beach Nourishment Funding**

- **Background**
- **Overview of Options**
- **Preferred Option**
- **Examples of MSDs**
- **County/Town MOU**





# **Proposed Beach Nourishment Funding**

- **Background**
  - **Discussions with County**
    - **Duck, Kill Devil Hills, Kitty Hawk, plus County Projects**
    - **DEC Associates**
    - **\$22 million, plus annual debt service**
    - **Development of Three Versions**

# Proposed Beach Nourishment Funding

- **Overview of Options**

- **Town**

- **Estimated project cost of \$14,443,816**
    - **Estimated construction cost \$13,693,816**
    - **Town portion to be paid with Special Obligation Bonds**

- **County**

- **Contributes \$22 million for three projects**
    - **Plus \$1 million annually for debt service (5 years)**
    - **Contributes \$750,000 for permits**
    - **Desire to have \$22 million in the FB after 5 years**



County of Dare  
 Beach Nourishment Projects - Summer 2015  
 Model Version Comparisons

Version 2

	<u>Version 2a</u>	<u>Version 2b</u>	<u>Version 2c</u>
	Towns Pay Pro-Rata Portion based on Project Costs	7.82¢ Town-Wide Property Tax Increase for All Towns	Equal % Town-Wide Property Tax Increase for All Towns
Dare Co. Upfront Money By Town:			
Duck	\$ 7,700,000	\$ 7,700,000	\$ 8,700,000
Kitty Hawk	\$ 8,580,000	\$ 10,300,000	\$ 11,300,000
Kill Devil Hills	\$ 5,720,000	\$ 4,000,000	\$ 2,000,000
Total Dare Co. Upfront Money:	\$ 22,000,000	\$ 22,000,000	\$ 22,000,000
Borrowed Amount By Town:			
Duck	\$ 6,743,816	\$ 6,743,816	\$ 5,743,816
Kitty Hawk	\$ 7,935,159	\$ 6,215,159	\$ 5,215,159
Kill Devil Hills	\$ 5,242,691	\$ 6,962,691	\$ 8,962,691
Total Borrowed:	\$ 19,921,666	\$ 19,921,666	\$ 19,921,666
Dare Co. Annual Money for D/S By Town:			
Duck	\$ 350,000	\$ 339,803	\$ 378,509
Kitty Hawk	\$ 390,000	\$ 694,586	\$ 373,389
Kill Devil Hills	\$ 260,000	\$ 56,551	\$ 223,982
Total Dare Co. Annual Money for D/S:	\$ 1,000,000	\$ 1,090,940	\$ 975,879

Town-Wide Property Tax Increase by Town:

Duck	\$0.0775	\$0.0782	\$0.0609
Kitty Hawk	\$0.1506	\$0.0782	\$0.0870
Kill Devil Hills	\$0.0480	\$0.0782	\$0.0931

% Increase Town-Wide Property Tax by Town:

Duck	37%	37%	29%
Kitty Hawk	50%	26%	29%
Kill Devil Hills	15%	24%	29%

New Town-Wide Property Tax by Town:

Duck	\$0.2875	\$0.2882	\$0.2709
Kitty Hawk	\$0.4506	\$0.3782	\$0.3870
Kill Devil Hills	\$0.3689	\$0.3991	\$0.4140

Beach Fund Balance Ending FY21:

\$ 20,847,284 \$ 21,521,840 \$ 22,360,415

Lowest FY Ending Beach Fund Balance:

\$ 8,840,394 \$ 8,840,394 \$ 8,840,394

# **Proposed Beach Nourishment Funding**

- **Version 2a (not preferred)**

- \$22 million from County split by estimated project cost
- Duck 35%, \$7.7 million
- County pays \$350k per year towards debt service
- Town pays \$6,743,816 through Special Obligation Bonds
- Debt Service of \$1,211,193 to \$1,022,367

County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015

Version 2a

Dare Pays Share of Towns' Debt Service up to \$1M/year

Town's Pro-rata Portion of \$22,000,000 Upfront Payment based on Project Costs

	Revenues	Expenditures (Before New Nourishment Projects)	One-Time Expenditures	New Nourishment Debt Service (Other Towns)	New Nourishment Debt Service (Dare Project)	Interest Earnings	EOY Fund Balance	Interest Earning Rate
2014	\$ 4,920,879	\$ 2,527,500			\$	105,963	\$ 19,416,231	0.65%
2015	\$ 7,797,100	\$ 2,180,000			\$	127,166	\$ 25,160,497	0.70%
2016	\$ 8,031,013	\$ 2,180,250	\$ 22,000,000		\$ 393,750	\$ 222,884	\$ 8,840,394	1.00%
2017	\$ 8,271,943	\$ 180,500		\$ 1,000,000	\$ 5,787,500	\$ 212,506	\$ 10,356,843	1.25%
2018	\$ 8,520,102	\$ 180,750		\$ 1,000,000	\$ 5,612,500	\$ 143,979	\$ 12,227,674	1.50%
2019	\$ 8,775,705	\$ 181,000		\$ 1,000,000	\$ 5,437,500	\$ 197,615	\$ 14,582,493	1.75%
2020	\$ 9,038,976	\$ 181,250		\$ 1,000,000	\$ 5,262,500	\$ 268,102	\$ 17,445,820	2.00%
2021	\$ 9,310,145	\$ 181,500		\$ 1,000,000	\$ 5,087,500	\$ 360,319	\$ 20,847,284	2.25%
2022	\$ 9,589,450	\$ 181,750			\$	478,664	\$ 30,733,647	2.50%
2023	\$ 9,877,133	\$ 182,000			\$	709,238	\$ 41,138,018	2.75%



County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015

Version 2a

Individual Town Project Breakdowns

	Permitting Cost	Construction Cost	Total Project Cost	% of Total Town Projects	Dare Co. Down Payment	Total Borrowed Amount	
Duck	\$ 750,000	\$ 13,693,816	\$ 14,443,816	35%	\$ 7,700,000	\$ 6,743,816	Special Obligation Bonds
Kitty Hawk	\$ 870,000	\$ 15,645,159	\$ 16,515,159	39%	\$ 8,580,000	\$ 7,935,159	Special Obligation Bonds
Kill Devil Hills	\$ 550,000	\$ 10,412,691	\$ 10,962,691	26%	\$ 5,720,000	\$ 5,242,691	Special Obligation Bonds
Total:	\$ 2,170,000	\$ 39,751,666	\$ 41,921,666	100%	\$ 22,000,000	\$ 19,921,666	
Dare		\$ 25,000,000	\$ 25,000,000		\$ -	\$ 25,000,000	160A-20 Installment Purchase
Totals:	\$ 2,170,000	\$ 64,751,666	\$ 66,921,666		\$ 22,000,000	\$ 44,921,666	

**County of Dare****Beach Nourishment Projects - Summer 2015****Individual Town Projects**

Term:

5 years

Interest Rate:

3.50%

**Duck - 35% of Total Projects**

1¢ = \$156,188

\$

0.21 Current Property Tax Rate

	Principal	Interest	Debt Service	County Contributed	Town Contributed	¢ on Property Tax	% Change in Tax Rate	New Property Tax Rate
2014								
2015								
2016	\$	106,215	\$ 106,215	\$ -	\$ 106,215			
2017	\$ 1,348,763	\$ 212,430	\$ 1,561,193	\$ 350,000	\$ 1,211,193	0.0775	37%	0.2875
2018	\$ 1,348,763	\$ 165,223	\$ 1,513,987	\$ 350,000	\$ 1,163,987	0.0745	35%	0.2845
2019	\$ 1,348,763	\$ 118,017	\$ 1,466,780	\$ 350,000	\$ 1,116,780	0.0715	34%	0.2815
2020	\$ 1,348,763	\$ 70,810	\$ 1,419,573	\$ 350,000	\$ 1,069,573	0.0685	33%	0.2785
2021	\$ 1,348,763	\$ 23,603	\$ 1,372,367	\$ 350,000	\$ 1,022,367	0.0655	31%	0.2755
2022								
2023								
Totals:	\$ 6,743,816	\$ 696,299	\$ 7,440,115					

# **Proposed Beach Nourishment Funding**

- **Version 2c (not preferred)**
  - \$22 million from County split by estimated project cost
  - All three Towns increase taxes by 29%
  - County contributes \$8.7 million
  - County pays \$378,509 per year towards debt service (decreases each year)
  - Town pays \$5,743,816 through Special Obligation Bonds
  - Debt Service of \$951,185 per year



County of Dare

Beach Nourishment Projects - Summer 2015

Tuesday, September 3, 2013

Version 2c

Dare Pays Share of Towns' Debt Service up to \$1M/year  
Equal % Town-Wide Property Tax Increase for All Towns

	Revenues	Expenditures (Before New Nourishment Projects)	One-Time Expenditures	New Nourishment Debt Service (Other Towns)	New Nourishment Debt Service (Dare Project)	Interest Earnings	EOY Fund Balance	Interest Earning Rate
2014	\$ 4,920,879	\$ 2,527,500				\$ 105,963	\$ 19,416,231	0.65%
2015	\$ 7,797,100	\$ 2,180,000				\$ 127,166	\$ 25,160,497	0.70%
2016	\$ 8,031,013	\$ 2,180,250	\$ 22,000,000		\$ 393,750	\$ 222,884	\$ 8,840,394	1.00%
2017	\$ 8,271,943	\$ 180,500		\$ 975,879	\$ 5,787,500	\$ 212,506	\$ 10,380,963	1.25%
2018	\$ 8,520,102	\$ 180,750		\$ 836,428	\$ 5,612,500	\$ 144,160	\$ 12,415,548	1.50%
2019	\$ 8,775,705	\$ 181,000		\$ 696,976	\$ 5,437,500	\$ 199,469	\$ 15,075,246	1.75%
2020	\$ 9,038,976	\$ 181,250		\$ 557,524	\$ 5,262,500	\$ 274,908	\$ 18,387,856	2.00%
2021	\$ 9,310,145	\$ 181,500		\$ 445,046	\$ 5,087,500	\$ 376,460	\$ 22,360,415	2.25%
2022	\$ 9,589,450	\$ 181,750				\$ 509,353	\$ 32,277,468	2.50%
2023	\$ 9,877,133	\$ 182,000				\$ 751,271	\$ 42,723,871	2.75%

**County of Dare****Beach Nourishment Projects - Summer 2015****Individual Town Project Breakdowns**

Tuesday, September 3, 2013

**Version 2c**

	Permitting Cost	Construction Cost	Total Project Cost	% of Total Town Projects	Dare Co. Down Payment	Total Borrowed Amount	
Duck	\$ 750,000	\$ 13,693,816	\$ 14,443,816	35%	\$ 8,700,000	\$ 5,743,816	Special Obligation Bonds
Kitty Hawk	\$ 870,000	\$ 15,645,159	\$ 16,515,159	39%	\$ 11,300,000	\$ 5,215,159	Special Obligation Bonds
Kill Devil Hills	\$ 550,000	\$ 10,412,691	\$ 10,962,691	26%	\$ 2,000,000	\$ 8,962,691	Special Obligation Bonds
Total:	\$ 2,170,000	\$ 39,751,666	\$ 41,921,666	100%	\$ 22,000,000	\$ 19,921,666	
Dare		\$ 25,000,000	\$ 25,000,000		\$ -	\$ 25,000,000	160A-20 Installment Purchase
Totals:	\$ 2,170,000	\$ 64,751,666	\$ 66,921,666		\$ 22,000,000	\$ 44,921,666	

**County of Dare****Beach Nourishment Projects - Summer 2015****Individual Town Projects****Term:****5 years****29.00% Increase for all****Interest Rate:****3.50%****Duck - 35% of Total Projects****1¢ = \$156,188****\$ 0.21 Current Property Tax Rate**

	Principal	Interest	Debt Service	County Contributed	Town Contributed	¢ on Property Tax	% Change in Tax Rate	New Property Tax Rate
2014								
2015								
2016	\$	90,465	\$ 90,465	\$ -	\$ 90,465			
2017	\$ 1,148,763	\$ 180,930	\$ 1,329,693	\$ 378,509	\$ 951,185	0.0609	29.00%	0.2709
2018	\$ 1,148,763	\$ 140,723	\$ 1,289,487	\$ 338,302	\$ 951,185	0.0609	29.00%	0.2709
2019	\$ 1,148,763	\$ 100,517	\$ 1,249,280	\$ 298,095	\$ 951,185	0.0609	29.00%	0.2709
2020	\$ 1,148,763	\$ 60,310	\$ 1,209,073	\$ 257,888	\$ 951,185	0.0609	29.00%	0.2709
2021	\$ 1,148,763	\$ 20,103	\$ 1,168,867	\$ 217,682	\$ 951,185	0.0609	29.00%	0.2709
2022								
2023								
<b>Totals:</b>	<b>\$ 5,743,816</b>	<b>\$ 593,049</b>	<b>\$ 6,336,865</b>					



# Proposed Beach Nourishment Funding

- **Version 2b (preferred)**
  - \$22 million from County split by estimated project cost
  - All three Towns increase taxes by 7.82 cents (37%)
  - County contributes \$7.7 million
  - County pays \$339,803 per year towards debt service (decreases each year)
  - Town pays \$6,743,816 through Special Obligation Bonds
  - Debt Service of \$1,221,390 per year

County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015

Version 2b

Dare Pays Share of Towns' Debt Service up to \$1M/year

7.82¢ Town-Wide Property Tax Increase for all Towns

	Revenues	Expenditures (Before New Nourishment Projects)	One-Time Expenditures	New Nourishment Debt Service (Other Towns)	New Nourishment Debt Service (Dare Project)	Interest Earnings	EOY Fund Balance	Interest Earning Rate
2014	\$ 4,920,879	\$ 2,527,500				\$ 105,963	\$ 19,416,231	0.65%
2015	\$ 7,797,100	\$ 2,180,000				\$ 127,166	\$ 25,160,497	0.70%
2016	\$ 8,031,013	\$ 2,180,250	\$ 22,000,000		\$ 393,750	\$ 222,884	\$ 8,840,394	1.00%
2017	\$ 8,271,943	\$ 180,500		\$ 1,090,940	\$ 5,787,500	\$ 212,506	\$ 10,265,903	1.25%
2018	\$ 8,520,102	\$ 180,750		\$ 951,488	\$ 5,612,500	\$ 143,297	\$ 12,184,564	1.50%
2019	\$ 8,775,705	\$ 181,000		\$ 852,963	\$ 5,437,500	\$ 196,442	\$ 14,685,247	1.75%
2020	\$ 9,038,976	\$ 181,250		\$ 762,250	\$ 5,262,500	\$ 268,698	\$ 17,786,920	2.00%
2021	\$ 9,310,145	\$ 181,500		\$ 671,538	\$ 5,087,500	\$ 365,312	\$ 21,521,840	2.25%
2022	\$ 9,589,450	\$ 181,750				\$ 491,359	\$ 31,420,899	2.50%
2023	\$ 9,877,133	\$ 182,000				\$ 727,963	\$ 41,843,994	2.75%

**County of Dare**

Tuesday, September 3, 2013

**Beach Nourishment Projects - Summer 2015****Version 2b****Individual Town Project Breakdowns**

	Permitting Cost	Construction Cost	Total Project Cost	% of Total Town Projects	Dare Co. Down Payment	Total Borrowed Amount	
Duck	\$ 750,000	\$ 13,693,816	\$ 14,443,816	35%	\$ 7,700,000	\$ 6,743,816	Special Obligation Bonds
Kitty Hawk	\$ 870,000	\$ 15,645,159	\$ 16,515,159	39%	\$ 10,300,000	\$ 6,215,159	Special Obligation Bonds
Kill Devil Hills	\$ 550,000	\$ 10,412,691	\$ 10,962,691	26%	\$ 4,000,000	\$ 6,962,691	Special Obligation Bonds
Total:	\$ 2,170,000	\$ 39,751,666	\$ 41,921,666	100%	\$ 22,000,000	\$ 19,921,666	
Dare		\$ 25,000,000	\$ 25,000,000		\$ -	\$ 25,000,000	160A-20 Installment Purchase
Totals:	\$ 2,170,000	\$ 64,751,666	\$ 66,921,666		\$ 22,000,000	\$ 44,921,666	



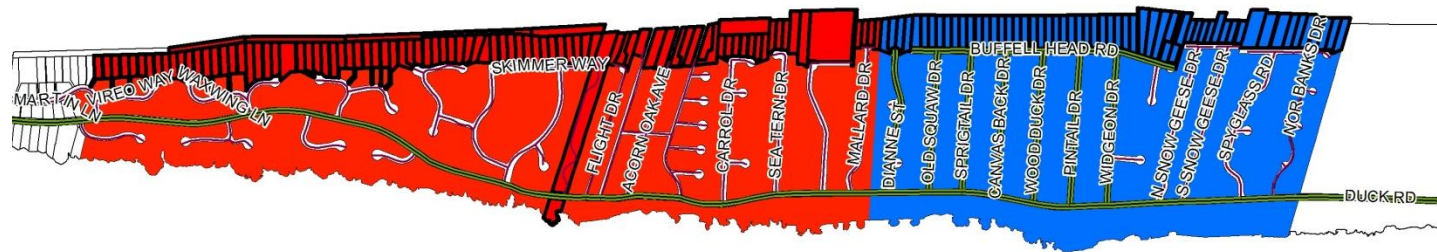
**County of Dare****Beach Nourishment Projects - Summer 2015****Term:****5 years****0.0782 Cents Tow****Individual Town Projects****Interest Rate:****3.50%****Duck - 35% of Total Projects****1¢ = \$156,188****\$ 0.21 Current Property Tax Rate**

	Principal	Interest	Debt Service	County Contributed	Town Contributed	¢ on Property Tax	% Change in Tax Rate	New Property Tax Rate
2014								
2015								
2016	\$	106,215	\$ 106,215	\$ -	\$ 106,215			
2017	\$ 1,348,763	\$ 212,430	\$ 1,561,193	\$ 339,803	\$ 1,221,390	0.0782	37%	0.2882
2018	\$ 1,348,763	\$ 165,223	\$ 1,513,987	\$ 292,597	\$ 1,221,390	0.0782	37%	0.2882
2019	\$ 1,348,763	\$ 118,017	\$ 1,466,780	\$ 245,390	\$ 1,221,390	0.0782	37%	0.2882
2020	\$ 1,348,763	\$ 70,810	\$ 1,419,573	\$ 198,183	\$ 1,221,390	0.0782	37%	0.2882
2021	\$ 1,348,763	\$ 23,603	\$ 1,372,367	\$ 150,976	\$ 1,221,390	0.0782	37%	0.2882
2022								
2023								
<b>Totals:</b>	<b>\$ 6,743,816</b>	<b>\$ 696,299</b>	<b>\$ 7,440,115</b>					

# **Proposed Beach Nourishment Funding**

- **Examples of MSDs**





-  Oceanfront
-  Reach 7
-  Reach 8

Example of Municipal Service District

For Discussion Purposes Only

MSD Tax Rate	Oceanfront Amount Generated	Additional Tax Per Parcel	Non-Oceanfront Amount Generated	Additional Tax Per Parcel
\$0.01	\$18,764	\$97.73	\$45,079	\$49.27
\$0.02	\$37,529	\$195.46	\$90,157	\$98.53
\$0.03	\$56,293	\$293.19	\$135,236	\$147.80
\$0.04	\$75,058	\$390.92	\$180,315	\$197.07
\$0.05	\$93,822	\$488.66	\$225,393	\$246.33
\$0.06	\$112,586	\$586.39	\$270,472	\$295.60
\$0.07	\$131,351	\$684.12	\$315,551	\$344.86
\$0.08	\$150,115	\$781.85	\$360,629	\$394.13
\$0.09	\$168,880	\$879.58	\$405,708	\$443.40
\$0.10	\$187,644	\$977.31	\$450,787	\$492.66
\$0.11	\$206,408	\$1,075.04	\$495,865	\$541.93
\$0.12	\$225,173	\$1,172.77	\$540,944	\$591.20
\$0.13	\$243,937	\$1,270.51	\$586,023	\$640.46
\$0.14	\$262,701	\$1,368.24	\$631,101	\$689.73
\$0.15	\$281,466	\$1,465.97	\$676,180	\$738.99
\$0.16	\$300,230	\$1,563.70	\$721,259	\$788.26
\$0.17	\$318,995	\$1,661.43	\$766,337	\$837.53
\$0.18	\$337,759	\$1,759.16	\$811,416	\$886.79
\$0.19	\$356,523	\$1,856.89	\$856,495	\$936.06
\$0.20	\$375,288	\$1,954.62	\$901,573	\$985.33
\$0.21	\$394,052	\$2,052.36		
\$0.22	\$412,817	\$2,150.09		
\$0.23	\$431,581	\$2,247.82		
\$0.24	\$450,345	\$2,345.55		
\$0.25	\$469,110	\$2,443.28		
\$0.26	\$487,874	\$2,541.01		
\$0.27	\$506,639	\$2,638.74		
\$0.28	\$525,403	\$2,736.47		
\$0.29	\$544,167	\$2,834.20		
\$0.30	\$562,932	\$2,931.94		
\$0.31	\$581,696	\$3,029.67		
\$0.32	\$600,460	\$3,127.40		
\$0.33	\$619,225	\$3,225.13		
\$0.34	\$637,989	\$3,322.86		
\$0.35	\$656,754	\$3,420.59		
\$0.36	\$675,518	\$3,518.32		
\$0.37	\$694,282	\$3,616.05		
\$0.38	\$713,047	\$3,713.79		
\$0.39	\$731,811	\$3,811.52		
\$0.40	\$750,576	\$3,909.25		
\$0.41	\$769,340	\$4,006.98		
\$0.42	\$788,104	\$4,104.71		
\$0.43	\$806,869	\$4,202.44		
\$0.44	\$825,633	\$4,300.17		
\$0.45	\$844,398	\$4,397.90		



# **Proposed Beach Nourishment Funding**

- **Examples of MSD – A**
  - **Town Debt service (minus County contribution) of \$1,348,763 for 5 years**
  - **Two MSDs: Oceanfront, Non-oceanfront**
  - **Oceanfront Pays: \$0.41, \$4,007 on avg.**
  - **Non-oceanfront Pays: \$0.10, \$493 on avg.**

Example of Municipal Service District  
**For Discussion Purposes Only**  
 Example A

Fiscal Year	Principal	Interest	Debt Service	County Contribution	General Town Contribution	Oceantfront Contribution	Non-Oceanfront Contribution	Total
2016	\$0	\$106,215	\$106,215	\$0	\$106,215	\$0	\$0	\$106,215
2017	\$1,348,763	\$212,430	\$1,561,193	\$339,803	\$1,263	\$769,340	\$450,787	\$1,561,193
2018	\$1,348,763	\$165,223	\$1,513,986	\$292,597	\$1,262	\$769,340	\$450,787	\$1,513,986
2019	\$1,348,763	\$118,017	\$1,466,780	\$245,390	\$1,263	\$769,340	\$450,787	\$1,466,780
2020	\$1,348,763	\$70,810	\$1,419,573	\$198,183	\$1,263	\$769,340	\$450,787	\$1,419,573
2021	\$1,348,763	\$23,603	\$1,372,366	\$150,976	\$1,263	\$769,340	\$450,787	\$1,372,366
Estimated Parcels:						192	915	
MSD Rate:						\$0.41	\$0.10	
Tax Per Parcel:						\$4,007	\$493	

# Proposed Beach Nourishment Funding

- **Examples of MSD – B**
  - Town Debt service (minus County contribution) of \$1,348,763 for 5 years
  - General Town contribution of \$0.015, avg. of \$95
  - Two MSDs: Oceanfront, Non-oceanfront
  - Oceanfront Pays: \$032., \$3,127 on avg.
  - Non-oceanfront Pays: \$0.08, \$394 on avg.



Example of Municipal Service District  
For Discussion Purposes Only  
Example B

Fiscal Year	Principal	Interest	Debt Service	County Contribution	General Town Contribution	Oceantfront Contribution	Non-Oceanfront Contribution	Total
2016	\$0	\$106,215	\$106,215	\$0	\$106,215	\$0	\$0	\$106,215
2017	\$1,348,763	\$212,430	\$1,561,193	\$339,803	\$260,301	\$600,460	\$360,629	\$1,561,193
2018	\$1,348,763	\$165,223	\$1,513,986	\$292,597	\$260,301	\$600,460	\$360,629	\$1,513,987
2019	\$1,348,763	\$118,017	\$1,466,780	\$245,390	\$260,301	\$600,460	\$360,629	\$1,466,780
2020	\$1,348,763	\$70,810	\$1,419,573	\$198,183	\$260,301	\$600,460	\$360,629	\$1,419,573
2021	\$1,348,763	\$23,603	\$1,372,366	\$150,976	\$260,301	\$600,460	\$360,629	\$1,372,366
				Esimated Parcels:	2754	192	915	
				Project/MSD Rate:	\$0.015	\$0.32	\$0.08	
				Tax Per Parcel:	\$95	\$3,127	\$394	



# **Proposed Beach Nourishment Funding**

- **County/Town MOU**



# Proposed Beach Nourishment Funding

- Questions??

